ABSTRACT OF THE DISCLOSURE

The present invention relates to a ventilated seat having an insert with a seat portion, and having a flow control layer with first and second ports, a spacer having an inlay and a main portion, and a first fluid barrier where the inlay is substantially isolated from the main portion by a fluid-tight boundary. The present invention also relates to a ventilated seat having an insert with a seat portion and having a first flow control layer with at least one port, a first and a second spacer, and a fluid barrier comprising at least one port. The present invention also relates to a ventilated seat with an insert having a seat portion and having a flow control layer with a port and a plurality of flow holes in the seat portion, a spacer, a fluid barrier and at least one conduit with a plurality of flow holes located adjacent to the seat portion of the flow control layer. The seat also may include a fan in fluid communication with the spacer and a fluid conditioning device. The present invention also relates to methods of ventilating a seat. The method includes providing a thermoelectric device (TED) and conditioning air with the TED to provide heating or cooling and communicating that conditioned air through an insert with either pushing or pulling the condition air through the insert.